Joint Base Langley Eustis-Eustis's (JBLE-E)

Municipal Separate Storm Sewer System (MS4) Program Plan

12 Month Update

PY1: July 1, 2013 – June 30, 2014

Permit # VAR040035

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I. Introduction

This document represents Joint Base Langley Eustis-Eustis's (JBLE-E) plan to meet the requirements of the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), General Permit Number VAR040035 effective July 1, 2013.

JBLE-E has reviewed and assessed existing stormwater management operations and policies at the installation against the General Permit requirements including the six minimum control measures (MCM) and the Total Maximum Daily Loads (TMDL) special conditions requirements. Based on this review, the Installation has updated the MS4 Program Plan, with a goal of minimizing stormwater pollution to the maximum extent practical. This Program Plan outlines how JBLE-E will accomplish implementation and enforcement. The 733d Civil Engineer Division Environmental Element is the office with primary responsibility to implement this plan.

II. Environmental Management

Environmental Policy: The JBLE mission requires daily operations in the land, sea and air environments. JBLE is committed to performing duties to meet mission requirements in a manner that prevents pollution, protects the environment, and conserves natural resources. This commitment is documented in a formal Environmental Policy Statement dated June 4, 2013 using the C.L.E.A.N approach:

- **C**omply.....We will comply with all environmental regulations and all other requirements while reducing compliance costs and liabilities.
- **L**imit impact.....We will prevent pollution and minimize waste while cleaning up past sites of environmental concern and making efforts to achieve Chesapeake Bay conservation.
- **E**xecute plans.....We will identify and attain energy, environment, safety and occupational health objectives and targets through planning that is Specific, Measurable, Achievable, Realistic and Timely (SMART).
- **A**chieve improvements.....We will continuously improve our programs and processes through the use of effective management and planning.
- **N**otify.....We will communicate our environmental commitments and performance to all levels of our organization and local community.

Environmental Management System (EMS): JBLE-E has an ISO14001-conformant EMS to manage environmental program requirements. The core of the Fort Eustis EMS consists of three Cross Functional Teams: Land Management and Training Support, Procurement, and Quality of Life/Infrastructure. The Cross Functional Teams evaluate the installation's environmental aspects and impacts to identify the installation's significant aspects. The significant aspects are then used by the teams to develop objectives, targets and tasks to improve the sustainability and environmental status of the installation. The current list of significant aspects, established in 2012, are listed below. The significant aspects are re-evaluated every three years.

- **Resource Conservation** – Energy, Water, Fuel
- **Restoration Program Progress** – Includes all installation efforts to safeguard training lands, restore land for installation use, and general land use policies
- **Spills** – Reduction in number of spills and reportable spills

- **Waste Reductions** – All hazardous, non-hazardous, and special wastes
- **StormWater** – Includes Chesapeake Bay Initiatives, stormwater system improvements, and Low Impact Development progress

Environmental Management Procedures (EMPs): EMPs are developed to address specific Activity and base operational requirements. JBLE-E codifies all base environmental requirements and management procedures in JBLE Instruction 32-101, Environmental Management, (JBLE I 32-101) and associated EMPs. JBLE I 32-101 articulates policies and requirements while the various EMPs provide the specific what, when, and how to comply with the requirements. JBLE I 32-101 and the EMPs can be obtained at https://esohtn.com.

Environmental, Safety and Occupational Health (ESOH) Council: The ESOH Council is a forum to provide senior leadership involvement and direction at all levels of command; establish goals, measures, objectives and targets; and provide additional guidance to subordinate commands. The JBLE-E ESOH Council is chaired by the 633d Air Base Wing Vice Commander.

III. MS4 Program Plan

This section of JBLE-E's MS4 Program Plan describes how JBLE-E will implement and demonstrate compliance with each of the six minimum control measures (MCMs) listed in Section II B of the MS4 General Permit VAR040035. For each MCM, the Program Plan addresses JBLE-E's program goals (now and into the future), requirements of the permit, and program elements for compliance. Table 1 summarizes the updates included in this plan.

Table 1: 12-Month MS4 Program Plan Update Summary		
Program Update Requirement	*Permit Reference*	*Update Summary*
Public Education Outreach Plan (MCM 1 – Public Education and Outreach on Stormwater Impacts)	Section II B 1	Updated to address these requirements.
Public Participation Activities (MCM 2 - Public Involvement/Participation)	Section II B 2	Updated to address changes to Public Participation.
Illicit Discharge Procedures (MCM 3 – Illicit Discharge Detection and Elimination)	Section II B 3	Updated to address these requirements.
Individual Residential Lot Special Criteria (MCM 5 – Post- Construction Stormwater Management in New Development and Development on Prior Developed Lands)	Section II B 5 c (1) (d)	Updated to address these requirements.
Operator-Owned Stormwater Management Inspection Procedures (MCM 5 – Post-Construction Stormwater Management in New Development and Development on Prior Developed Lands)	Section II B 5	Updated to address these requirements.
Identification of Locations Requiring SWPPPs (MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 b	Updated to address these requirements.
Nutrient Management Plan (NMP) Locations (MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 c (1) (a)	Updated to address these requirements.
Training Schedule and Program (MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6	Updated to address these requirements.

A. MCM 1: Public Education and Outreach on Stormwater Impacts

In keeping with EPA guidance, JBLE-E defines "public" as the resident and employee population (to include contractors) within the fence line of the installation.

The goals of the MS4 Public Education and Outreach program are to:

- Increase target audience knowledge about how to reduce stormwater pollution, with emphasis on reducing impacts to the Chesapeake Bay and tributaries;
- Increase target audience awareness of hazards associated with illegal discharges and improper disposal of waste, to include legal implications;
- Implement program strategies targeted towards audiences most likely to have significant stormwater impacts.

1. Educational Priorities Rationale and Target Audience – Section II B 1 c (1-2)
JBLE-E's MS4 Public Education and Outreach Plan emphasizes three high-priority water quality issues. These priorities have been selected because they are currently the most pressing stormwater-related impacts on JBLE-E.

a) Construction Stormwater Management/Erosion and Sediment Control

Rationale: JBLE-E is continuing to develop and implement the General Development Plan. This plan calls for a substantial amount of demolition and construction activities. As with all demolition and major new construction, Construction Stormwater Management (SWM) and Erosion and Sediment Control (E&SC) must be addressed during any project planning meetings. Due to a turnover of personnel in the office of primary responsibility, the focus for training during PY1 will be for Environmental Element staff directly involved in project planning, project reviews, and oversight for construction activities from a stormwater management perspective.

Target Audience: JBLE-E Environmental Element staff.

Estimated Audience Size: Approximately 2 employees in PY1.

b) Spill Reduction

Rationale: The Quality of Life/Infrastructure Cross Functional Team established an objective in February 2014 to reduce spills on JBLE-E, with an emphasis on the main gate entrance (construction vehicles) and the gas station (pumps).

Target Audience: JBLE-E employees.

Estimated Audience: Approximately 12,500 employees and contractors.

c) Chesapeake Bay TMDL

Rationale: Meeting the reductions required by the Chesapeake Bay TMDL will be a long-term challenge. The Quality of Life/Infrastructure Cross Functional Team established an objective in February 2013 to evaluate the stormwater management infrastructure to

determine suitability for low impact development (LID) projects. In addition, the Land Management and Training Support Cross Functional Team established an objective in February 2014 to initiate a drainage study of military training areas with respect to controlling erosion and improving habitat. The Civil Engineer Division is responsible for managing long term maintenance of JBLE-E facilities, stormwater infrastructure and grounds, ensuring projects incorporate LID techniques and best management practices (BMPs) where possible.

Target Audience: Civil Engineer Division and Range Control personnel.

Estimated Audience: Approximately 30 employees.

2. Relevant Messages/Outreach Material Summary – Section II B 1 c (3)
JBLE-E will use a combination of relevant messages and outreach materials to educate target audiences about high priority areas. The following techniques will be used.

Websites: JBLE-E uses both internal and external websites for training and awareness. JBLE-E will continue to maintain and update a website that includes current information about environmental regulations and the Installation's environmental programs. The goal is to provide installation personnel with up-to-date information regarding pollution prevention and to provide employees with links to other educational environmental websites.

The intranet site can be found at https://post.intranet.eustis.army.mil/enrd. The public version of JBLE-E website can be found at www.esohtn.com.

Articles: Environmental Element staff will prepare articles relating to installation operations, impacts to stormwater, and steps personnel can take to minimize pollutants in stormwater runoff. Articles will be published via the Warrior newspaper and posted on the JBLE-E Facebook page (www.facebook.com/forteustisenvironment). The goal is to disseminate stormwater impact information to as many employees, contractors and vendors as possible.

Email Messages: Mass emails are an effective mechanism to get messages to a large group of employees. Mass emails can be sent to the entire workforce, select organizations and even job groups (such as Activity Environmental Coordinators (AECs)). Email messages can provide guidance on any stormwater-related topic that a target audience may need.

Training Programs: Storm water pollution prevention training is available for all base personnel, including those that handle Municipal Solid Wastes, Recycling Materials, Hazardous Materials, Hazardous Wastes, Non-Hazardous Wastes, Universal Wastes, and Hazardous Substances that have the potential to contaminate storm water runoff at JBLE-E. There are two levels of training offered to installation personnel: a) Level 1 consists of Basic Environmental Management Awareness (BEMA) or Leadership Environmental Management Awareness and Competency (LEMAC) training; and b) Level 2 consists of Advanced Environmental Management (AEM) training.

The BEMA/LEMAC course is solely provided in an online format through the ESOHTN website (www.esohtn.com) and is required for all installation personnel within 30 days of arrival and annually thereafter. AEM training is required for Activity Environmental Coordinators (AEC), Unit Environmental Coordinators, & Hazardous Waste Coordinators. The AEM training is a classroom course for initial training and an online course for annual

refresher training. Environmental Element staff also provide awareness training for the US Army Transportation School's Advanced Marine Warrant Officers (WOAC) course as needed.

The Environmental Element conducts additional training on topics that have an impact on MS4 Program Plan implementation. Training such as Waste Management, Spill Response, Aboveground Storage Tank inspections and Hazardous Waste and Material Handling all have impacts on stormwater management. Environmental Management Training Programs of Instruction (EMP 4.4.2 Tab 2) provides a complete listing.

Facility Multimedia Environmental Assessments: The Environmental Element performs annual multimedia assessments for all Industrial Activities as well as the housing community, Army Air Force Exchange facilities (gas station, car wash, food court, etc.) and Morale and Welfare facilities (car wash, golf course, camping area, go cart track, horse stables, etc.). These assessments along with the AEC's quarterly inspections provide an opportunity to highlight implementation of any stormwater management practices they have undertaken. It allows another opportunity outside the AEM training to educate the workforce in the field on any changes to stormwater laws or regulations and provide updates to their chain of command.

EMS: The biannual Cross Functional Team and quarterly ESOH Council meetings provide education to senior managers and leaders across JBLE-E.

3. Public Participation with Education and Outreach Development – Section II B 1 c (4)
JBLE-E encourages and appreciates employee feedback during education and outreach development. This is accomplished with the EMS Cross Functional Teams. The Cross Functional Teams are responsible for identifying, categorizing and prioritizing JBLE-E's environmental aspects and impacts as well as developing and implementing objectives, targets and programs to address the significant environmental aspects.

The Cross Functional Teams consist of a cross section of JBLE-E employees from different organizations which allows for diverse feedback and opinions. Since stormwater has been selected as a significant aspect, the Cross Functional Team are involved in developing the program, including MS4-related efforts.

Annually, JBLE-E will post announcements to the JBLE-E intranet (https://post.intranet.eustis.army.mil/enrd/) calling for feedback on stormwater-related education and outreach. The call will ask employees what they feel is the most pressing stormwater issues the installation faces and where the Environmental Element should focus educational efforts.

4. Outreach Plan – Section II B 1 (c) (5)
Table 2 provides the Outreach Plan for PY2 (July 1, 2014 – June 30, 2015)

Table 2: Outreach Plan for PY2 (July 1, 2014 – June 30, 2015)			
High Priority	Target Audience	Outreach Goal	Outreach type and Timeframes
Construction Erosion and Sediment Issues	Employees and Contractors – 20	20% of audience annually	JBLE-E ESOHTN website, BEMA and LEMAC training Meetings with onsite contractors and employees involved in construction (as needed) Employee email messages – 2 x year
Spill Reduction	General Employee Population - 12500	20% of audience annually	AEM training presentation 2 x year BEMA and LEMAC training (ongoing yearly)
Chesapeake Bay TMDL	Civil Engineer Division staff and base operations contractors - 50	20% of audience annually	Sharing of NDCEE recommendations in project meetings, staff meetings and via emails

5. Annual Review of Program Outreach Effectiveness and Updates to the MS4 Program Plan– Section II B 1 (c) (6) and Section II B 1 (f)
JBLE-E will annually evaluate the effectiveness of its Public MCM 1 program materials and delivery mechanisms to reach target audiences. JBLE-E will evaluate the education and outreach program for:

a) Appropriateness of the high-priority stormwater issues;
b) Appropriateness of the selected target audiences for each high-priority stormwater issue;
c) Effectiveness of the message or messages being delivered; and
d) Effectiveness of the mechanism or mechanisms of delivery employed in reaching target audiences.

JBLE-E will address any shortcomings and weaknesses with a revised MS4 program plan submittal to VDEQ.

6. Annual Reporting Requirements – Section II B 1 (g)

JBLE-E will include the following information in each annual report:

a) A list of the education and outreach activities conducted during the reporting period for each high priority water quality issue, the estimated number of people reached, and an estimated percentage of the target audience or audiences that were reached; and

b) A list of the education and outreach activities that will be conducted during the next reporting period for each high-priority water quality issue, the estimated number of people reached, and estimated percentage of the target audience or audiences that will be reached.

B. MCM 2: Public Involvement and Participation

The Environmental Element currently hosts several successful public participation programs. JBLE-E feels it is important to engage with the public, participate in local events, and promote participation with the surrounding communities. JBLE-E senior leadership encourages public involvement, and these efforts are strongly supported.

1. Public Involvement – Section II B 2 (a)

JBLE-E's policy is to comply with all federal, state and local public notice requirements. JBLE-E has many public notice requirements associated with environmental compliance such as EPCRA Tier II and TRI reporting; public involvement on environmental assessments developed pursuant to NEPA requirements; VDEQ VPDES and air permitting notifications; and public involvement in actions that could adversely affect historic properties. All public notices documentation is kept on file in the Environmental Element office and available for viewing at any time.

Updates to the MS4 Program Plan will be completed at a minimum once per year by the Environmental Element in compliance with Table 1 of the General Permit. The most up-to-date version of MS4 Program Plan will be posted on the JBLE-Eustis public website under the Environmental section on the right hand side of the home page. Notification that the Program Plan has been updated and is available will be made through group emailing. Records of these actions will be kept on file by the Environmental Element Stormwater Media Manager. The link to the website is:
http://www.jble.af.mil/library/hurricaneinformation/index.asp

Annual reports will also be posted on the JBLE-E public website within 30 days of submittal to the VDEQ and retain copies of annual reports online for the duration of the General Permit. Notification that the Program Plan has been updated and is available will also be made through group emailing. Records of these actions will be kept on file by the Environmental Element Stormwater Media Manager.

Prior to applying for renewed permit coverage, JBLE-E will notify the public and provide for receipt of comments on the proposed MS4 Program Plan. This notification will be made at least three (3) months in advance of reapplication to ensure adequate time for public comment and consideration.

2. Public Participation – Section II B 2 (b)
JBLE-E communicates through all media including internal and external websites, our community cable channel, the base newspaper as well as frequent interactions with community groups including the Department of Game and Inland Fisheries, the York County Extension Office, and the Newport News Recycling Office.

JBLE-E was an early member of the Virginia Regional Environmental Management System (VREMS) group and continues to interact with other members to explore sustainable practices and partner to enhance our sustainability program.

Fort Eustis participates in a Secretary of the Air Force Program to partner with our local public and private neighbors. The Public-Public, Public-Private, Partnership Program (P4) seeks to identify and develop opportunities to share resources, increase efficiency and improve effectiveness of operational, educational, and recreational programs. The JBLE P4 program is currently focused on the Virginia Peninsula. As the program matures, there may be opportunities for broader partnerships.

JBLE-E will participate, through promotion, sponsorship or other involvement, in a minimum of four (4) local events annually. The activities shall be aimed at increasing public participation to reduce stormwater pollutant loads; improve water quality; and support local restoration and clean-up projects, programs, groups, meetings or other opportunities for public involvement. JBLE-E will utilize the Installation weekly newspaper, The Warrior, webpage announcements and Facebook page announcements to promote local programs and events. Events such as Clean the Bay Day, America Recycles Day, Earth Day and the annual spring clean-up will be promoted.

C. MCM 3: Illicit Discharge Detection and Elimination (IDDE)

This control measure requires a system to identify and eliminate non-stormwater discharges to the installation's MS4. Illicit discharges are those not made entirely of stormwater and which are otherwise not allowed. Examples of illicit discharges are domestic and industrial wastewater (cross connections), vehicle wash water, and fuel spills. Examples of non-stormwater discharges that *are* allowable include air conditioner condensate, runoff from irrigation and water from fire hydrant flushing.

1. Storm Sewer System Map – Section II B 3 (a)
The Civil Engineer Division's GIS personnel has experienced mapping capabilities. The Environmental Element staff has provided GIS personnel electronic files to ensure all current and past GIS data layers obtained via several contract actions are incorporated in the installation's database. The GIS staff maintains the storm sewer system map, which is available upon request.

An updated map of the stormwater sewer system and all stormwater outfalls is required based on a review of current GIS data. JBLE-E will program a project to have a complete and updated stormwater sewer system map and information table within 48 months of permit coverage.

2. Illicit Discharge Prohibition – Section II B 3 (b)
Illicit discharges are prohibited via JBLE-E I 32-101 (Environmental Management) and AFI 32-1067 (Civil Engineering Water and Systems). At any time when unauthorized non-stormwater discharges or illicit connections to the stormwater system are identified, the Environmental Element shall be notified. The Civil Engineer Division (Engineer Flight, Operations Flight, and Environmental Element staffs) will work to implement corrective measures in-house or under contract to eliminate the discharges.

3. IDDE Procedures – Section II B 3 (c)
Procedures to detect, identify and address unauthorized non-stormwater discharges, including illegal dumping, are covered in EMP 4.4.6.2, *Wastewater-Stormwater Management*, and EMP 4.4.7, *Spill Prevention and Response*. Section 7 of the JBLE-E Storm Water Pollution Prevention Plan (SWP3) for VPDES permit VA0025216 outlines spill procedures for the three main industrial activities – Motor pools, Felker Army Air Field and Third Port.

4. Public IDDE Reporting – Section II B 3 (d)
Information concerning the reporting of any pollution and/or illicit discharge is continually distributed throughout the installation. The phone numbers for JBLE-E Fire and Emergency Services will be utilized as the hotline numbers as they are the installation's First Responders, and the phone lines are manned 24 hours per day/7 days per week.

5. Annual Reporting – Section II B 3 b
The following information will be included in annual reports:

a) A list of any written notifications of physical interconnections given by JBLE-E to other MS4s;
b) The total number of outfalls screened during the reporting period, the screening results, and detail of any follow-up actions necessitated by the screening results; and
c) A summary of each investigation conducted by the operator of any suspected illicit discharge. The summary must include: (i) the date that the suspected discharge was observed, reported, or both; (ii) how the investigation was resolved, including any follow-up, and (iii) resolution of the investigation and the date the investigation was closed.

D. MCM 4: Construction Site Stormwater Runoff Control

The purpose of this control measure is to develop, implement and enforce a program to reduce pollutants in stormwater from construction activities greater than or equal to 2500 square feet (Chesapeake Bay Preservation Act). JBLE-I 32-101 requires compliance with Virginia's Erosion and Sediment Control regulations and includes a policy to reduce pollutant runoff from construction activities. It also mandates erosion and sediment controls and requires operators to control waste and apply for construction permits.

The Environmental Element performs oversight site inspections and has the authority to stop work for noncompliance with stormwater regulations. A database is used to track data on all construction projects, including acreage disturbed and BMPs used. The following information will be included in annual reports:

a) The total number of regulated land-disturbing activities;

b) The total number of acres disturbed;
c) The total number of inspections conducted; and
d) A summary of the enforcement actions taken, including the total number and type of enforcement actions taken during the reporting period.

E. MCM 5: Post-Construction Stormwater Management

VSMP regulations, especially the new Technical Criteria Part II B and the federal EISA Section 438 requirements, have reinforced the importance of an effective post-construction stormwater management program. Permanent SWM facilities are used to limit/reduce pollutant loads and to maintain or restore predevelopment hydrology of the property with regard to temperature, rate, volume and duration of flow.

Engineering Technical Letter (ETLs) from the US Air Force Engineering Technical Center are intended to provide procedures and practices for minimizing stormwater pollution from Air Force construction activities. They provide guidance for construction inspectors regarding temporary sediment and erosion controls; operations and maintenance guidance for stormwater infrastructure; and permanent stormwater BMPs. ETL 03-1, *Storm Water Construction Standards*, is used as guidance.

1. Legal Authorities – Section II B 5 (d) (1)
The following lists JBLE-E legal authorities:

- VDEQ Stormwater Management Program Permit Regulations 4VAC50-60;
- Municipal Separate Storm Sewer System (MS4) Permit # VAR040035;
- AFI 32-7041 Water Quality Compliance 10 December 2003 (rev 28 January 2010);
- JBLE I 32-101, *Environmental Management*, 28 Jan 14; and
- EMP 4.4.6.16, *Contracting*

2. Written Procedures for SWM Facility Design/Installation – Section II B 5 (d) (2)
Written procedures for the design/installation of SWM is included in all military construction projects. Specifically, construction design is in ETL 03-1, *Storm Water Construction Standards*. This ETL is being replaced (final version due July or August 2014) by ETL 14-1, *Construction and Operation and Maintenance for Storm Water Systems*. ETL 14-1 will provide updated procedures and practices for minimizing storm water pollution from Air Force construction activities, guidance for construction inspectors regarding temporary sediment and erosion controls, operations and maintenance (O&M) guidance for stormwater infrastructure (i.e., separate storm sewers, associated appurtenances, and drainage areas), and permanent stormwater BMPs. These ETLs also provides troubleshooting guides for inspection and maintenance of various SWM BMPs.

A copy of US Air Force ETLs can be found at: Construction Criteria Base - Engineering Technical Letters (AFETL) Whole Building Design Guide

3. Inspection Policy for SWM Inspections – Section II B (d) (3)
Post construction inspections shall be made in accordance with the manufacturer's and/or engineer's recommendations. Inspections are accomplished on post-construction SWM facilities by Civil Engineering Division staff prior to final acceptance of the site from the

contractor. At a minimum JBLE-E will inspect all SWM at least annually using guidance in ETL 03-1 and then use the guidance in ETL14-1 when published. Maintenance to SWM facilities will performed as required. The Civil Engineer Division Operations Flight will need to modify the existing base operations contract or award new contracts to conduct the appropriate maintenance.

4. Private Owned SWM Facilities – Section II B 5 (d) (4)
JBLE-E residential housing is privatized. Balfour Beatty Communities (BBC) is the contractor who manages residential housing. BBC is a large corporation and has a construction services division that is responsible for construction and post construction SWM and E&SC.

5. Operator Owned SWM Facilities – Section II B 5 (d) (5)
Written procedures for inspections of Operator-Owned SWM facilities are outlined in the SWPPP for VPDES VA0025216 and ETL 03-1, *Construction and Operation and Maintenance for Storm Water Systems.*

6. Roles and Responsibilities – Section II B 5 (d) (6)
JBLE-E EMP 4.4.6.2.2, *Stormwater Management*, details the Roles and Responsibilities for SWM. JBLE-E will re-establish a Stormwater Pollution Prevention Team (SWPPT). The purpose of the SWPPT is to assist in the implementation, evaluation, and revision of the SWP3. The SWPPT consists of member from the following organizations: Civil Engineering Division Engineering Flight, Operations Flight, Fire and Emergency Services Flight, Installation Management Flight Environmental Element, Activity Environmental Coordinators for high priority facilities, Public Affairs, and the Judge Advocate Office. Team responsibilities include, but are not limited to:

a) Implementing the VPDES permit and SWP3 requirements;
b) Defining and agreeing upon an appropriate set of goals for the storm water program;
c) Being aware of any changes that are made in operations to determine whether any changes must be made to the SWP3; and
d) Maintaining a clear line of communications with installation leadership to ensure a cooperative partnership.

7. Stormwater Management Tracking and Reporting – Section II B 5 (e)
JBLE-E will maintain and submit in the annual report an electronic database that includes:

a) The stormwater management facilities brought online during the reporting period and type;
b) A general description of the facility's location, including the address or latitude and longitude;
c) The acres treated by the facility, including total acres, as well as the breakdown of pervious and impervious acres;
d) The date the facility was brought online (MM/YYYY). If the date is not known, the operator shall use June 30, 2005, as the date brought online for all previously existing stormwater management facilities;
e) The sixth order hydrologic unit code (HUC) in which the stormwater management facility is located;
f) The name of any impaired water segments within each HUC listed in the 2010 § 305(b)/303(d) Water Quality Assessment Integrated Report to which the stormwater management facility discharges;

g) Whether the stormwater management facility is owner-operated or privately owned;
h) Whether a maintenance agreement exists if the stormwater management facility is privately owned; and
i) The most recent inspection of the stormwater management facility. JBLE-E will also annually track and report the number of inspections completed and, when applicable, the number of enforcement actions taken to ensure long-term maintenance.

F. MCM 6: Pollution Prevention (P2)/Good Housekeeping for Operations

JBLE-E Civil Engineering Division performs maintenance of roads, grounds and the storm sewer collection system. This control measure focuses on P2 and good housekeeping to improve stormwater quality. Procedures are designed to minimize or prevent pollutant discharges from daily operations such as road maintenance, and application of pesticides and herbicides.

1. Stormwater Management Tracking and Reporting – Section II B 6 (b)

Previous surveys indicate a total of 110 facilities at the installation have activities that may impact stormwater quality. Inspected facilities were designated as industrial or non-industrial based on SIC codes assigned to each facility. The SIC is a U.S. government system for classifying industries by a four-digit code. Basic information including building number, shop name and symbol, and point of contact name were collected as part of facility inspections. Information regarding activity-specific information including industrial activities conducted; storage and use of potential stormwater pollutants; and location and status of storage tanks, oil/water separators (OWSs), wash racks, and other activities with potential to impact stormwater runoff were documented during the surveys.

Industrial activities at JBLE-E can be attributed to three industrial sectors: water transportation, land transportation, and air transportation. SWP3 requirements for each sector are presented in VPDES Permit No. VA0025216. Activities related to each industrial sector are typically contained to within a general area on the installation.

Most high-priority facilities on JBLE-E are covered under a VPDES Phase I permit and the industrial SWPPP. The SWPPP addresses: (1) minimizing the use of chemicals susceptible to exposure and runoff; (2) keeping exposure areas clean; (3) minimizing runoff contamination; and (4) procedures for specific operations and activities in specific exposure areas. There are a total of 40 industrial outfalls from the following activities: 7th, and 597th Brigades; 10th; and 53th Battalion motor pools; Logistics Readiness Division maintenance facilities; Civil Engineer Division equipment storage and maintenance facilities; Felker Army Air Field; Less-than-90-Day Hazardous Waste Accumulation Facilities; Hazardous Materials Issue Center and Storage areas; the Recycling Center; the former coal yard; the golf course maintenance yard; and the Third Port.

There are 70 outfalls that receive municipal stormwater runoff. Municipal high-priority areas not subject to the VPDES Phase I Permit include 1) road, street and parking lot maintenance; 2) application, storage, transport, and disposal of pesticides, herbicides and fertilizers; and 3) vehicle washing.

JBLE-E presently implements the following procedures to minimize the use of pollutants that are susceptible to runoff:

a) Cleanup of Paved Surfaces (Street Sweeping): Street sweepers are used to remove debris and accumulations from streets and parking lots by the base operation contractor GMS. JBLE-E currently implements a regular street sweeping schedule of once every one or two weeks. Water is carried on the street sweeper and applied during sweeping activities to help manage dust from the street sweepers.

b) Cleanup for Shops, Work Areas, and Storage Areas: Routine cleanup is scheduled and conducted for shops, work areas, and storage areas to minimize hazardous conditions to the employees and/or the environment. In addition, work areas are maintained to the standards dictated by the Air Force Occupation Safety and Health (AFOSH) requirements, and personnel are provided training in safety procedures and good housekeeping.

c) Contractor- Operated Sites: Contractors performing construction activities on the installation are required to operate under a Construction Storm Water Permit and individual SWPPP for construction sites exceeding one acre. Sites not exceeding one acre fall under the installation MS4 Permit. The Environmental Element Stormwater Media Manager and contract quality assurance/quality control (QA/QC) representative monitor the construction sites to ensure that contractors are implementing required stormwater BMPs according to their specific construction site SWPPP. Contractors are responsible for ensuring that their personnel are properly trained in the SWPPP for their construction sites.

d) Pesticide and Herbicide Selection and Application: The installation is covered under VPDES Permit No. VAG87 for pesticide application. In addition, the JBLE-E Integrated Pest Management Plan (IPMP) has been incorporated into this plan by reference.

e) Vehicle, Vessel, and Equipment Washing: Vehicles, vessels, and equipment are routinely washed as part of normal maintenance and care, as well as to reduce the potential for spreading materials accumulated on the equipment. Government-owned vehicles, vessels, and equipment are washed in approved locations at the installation. An installation policy for residential and fund raiser car washes will have to be developed and implemented to reduce runoff to impervious surfaces.

2. Turf and Landscape Management – Section II B 6 (c) (1) (a)

JBLE-E will continue to strictly limit the use of nutrients and fertilizer applications in all housing areas and the 1000-acre Pines Golf Course. JBLE-Eustis will also include the horse stables/pasture in the Nutrient Management Plans developed for the installation. Included in the management of turf and landscaping activities at JBLE-E is strict adherence to the Installation Pest Management Plan. The following information from that plan is detailed below.

a) JBLE-E follows an Integrated Pest Management (IPM) approach to managing the various animal and plant species identified as pests affecting military operations to include recreational activities and related facilities such as the Pines Golf Course. This approach is mandated by Department of Defense Instruction (DODI) 4150.07, *DOD Pest Management Program*, and AFI 32-1053, *Integrated Pest Management Program*. Pesticides used at Fort Eustis and the golf course include insecticides, herbicides, fungicides, acracides and nematocides.

b) Pest control activities, including pesticide applications at the Pines Golf Course, are performed in accordance with federal and state regulations. Compliance with such regulations is managed through the implementation of the Fort Eustis Integrated Pest Management Plan (IPMP). The plan is functional for a 5-year period; however, it must be reviewed annually in accordance with US Air Force policy. This review includes examining existing pest control techniques, pesticides used, new pest species not previously identified, and other issues to ensure the plan remains consistent with state and federal regulations. Golf course pest control is subject to the provisions of the IPMP.

c) Management of the IPMP and the overall IPM program is accomplished with a trained individual. The plan is managed by the Fort Eustis Installation Pest Management Coordinator (IPMC); this individual must be have received IPMC training as well as pest management quality assurance evaluator training and DOD certification in categories 2 (Forest), 3 (ornamental and turf), 5 (aquatic systems), 6 (right-of-way), 7 (industrial, institutional, structural and health), 8 (public health) and 11 (aerial applications).

d) Application of pesticides is only accomplished by authorized pesticide applicators who are DOD certified or certified by the Virginia Department of Agriculture and Consumer Services (VDACS) in appropriate categories. The Pines Golf Course current has one pesticide applicator who holds a current, valid VDACS Pesticide applicator Certificate for category 3B (turf). As a result this individual is a trusted applicator who is familiar with the respective state regulations including performing applications solely in accordance with the respective pesticide label. This individual provides a monthly pesticide application report to the IPMC articulating the type and amount of active ingredients used.

e) A screening process is used to determine whether a pesticide can be used before actual use or application. The golf course maintenance superintendent (pesticide applicator) requests pesticides by submitting a formal request along with labels and safety data sheets to the IPMC. The IPMC reviews the request to determine if authorized for use in Virginia, its actual need, whether less toxic materials are available, etc. If the IPMC deems the product is appropriate for use, the request is forwarded to the Major Command (Air Combat Command) for approval.

f) JBLE-E prepared a Pesticide Discharge Management Plan (PDMP) as required to meet compliance with this General Permit No. 87 VPDES General Permit for Discharges Resulting from the Application of Pesticides to Surface Water permit. The PDMP is an appendix to the IPMP. It is reviewed annually along with the IPMP.

3. High Priority Facilities Analysis –Section II B 6 (f) (2)

Facility-specific stormwater conditions for the water transportation sector are presented in Part I.C.4 (b) of the installation's VPDES permit. This applies to stormwater discharges associated with industrial activities from water transportation facilities that have vehicle and/or vessel maintenance shops and/or equipment cleaning operations. The water transportation sector includes facilities at Third Port located in the northwest portion of the installation. Third Port consists of facilities used to perform vessel maintenance, washing, and welding activities. In addition, vessels are brought into the port and docked. While docked, maintenance activities can be performed on the vessels. The stormwater controls section specifically mentions certain areas discussed further in the SWPPP. These areas include good housekeeping practices (i.e., pressure washing area, blasting and painting areas, material storage areas, engine maintenance and repair areas, material handling areas,

dry dock activities, and the general yard area). Third Port is not equipped with a dry dock; however, a floating crane barge is utilized approximately twice per year if there is a need to perform maintenance that requires vessels being removed from the water.

Facility-specific stormwater conditions related to the land transportation sector associated with industrial activities from ground/rail transportation facilities with vehicle and equipment maintenance shops are discussed in VPDES Permit No. VA0025216, Part I.C.4 (a). The stormwater controls section specifically calls out certain areas for a focus within the SWPPP. These areas include the following: good housekeeping practices for specified areas (i.e., fueling areas, material storage areas, vehicle and equipment cleaning areas, vehicle and equipment maintenance areas, and locomotive sanding), routine facility inspections, employee training, and monitoring requirements.

Facility-specific stormwater conditions for the air transportation sector are included in the VPDES Permit No. VA0025216 for air transportation facilities (includes airports; airport terminal services; air transportation; flying fields; air courier services; and locations engaged in operating and maintaining airports, and servicing, repairing, or maintaining aircraft with a specific focus on deicing/anti-icing activities). The stormwater controls section presents certain areas that are intended for further discussion in the SWPPP, including good housekeeping practices (i.e., aircraft, ground vehicle, and equipment maintenance, cleaning and storage areas, material storage areas, and airport fuel system and fueling areas).

4. Annual Training Plan – Section II B 6 (f) (4)

BEMA, LEMAC, and AEM training (see Section III A 2 of this Program Plan) is required IAW EMP 4.4.2, *Environmental Awareness & Competency Training*. BEMA or LEMAC as appropriate are required within 30 days of arrival on the installation and annually thereafter. AEM training is provided to Activity Environmental Coordinators (AECs), Unit Environmental Coordinators (UECs), and Hazardous Waste Coordinators (HWCs) by Environmental Element staff normally during the months of March and October. The Environmental Element staff also provide environmental awareness training for the WOAC course as needed. The installation ICP and SPCC Plans, incorporated by reference, present additional training available to base personnel.

JBLE-E personnel involved in spill response have maintained the required training as specified in AFI 10-2501 and the base ICP. Specific training requirements are mandated by Federal regulations, including 29 CFR 1910, 40 CFR 112, and National Fire Protection Association standards. To prevent expiration of training requirements, yearly refresher courses are provided for personnel, when applicable. Individual training records, such as AF Form 55, *Employee Safety and Health Record*, or other approved documentation are used to record participation in training courses.

In addition, oil-handling personnel must be trained in the maintenance of equipment to prevent discharges; discharge procedure protocols, applicable pollution control laws, and regulations; general facility operations; and the contents of the base SPCC Plan. Course materials are maintained by the Environmental Element on ESOHTN, and AF Form 55 or other approved documentation (examples are provided in the ICP) are used to record participation in training courses.

5. Annual Reporting - Measurable Goals – Section II B 6 (g)
JBLE-E will submit the following in each annual report:

a) A summary report on the development and implementation of the daily operational procedures;
b) A summary report on the development and implementation of SWPPPs;
c) A summary report on the development and implementation of the turf and landscape nutrient management plans that includes:
  i) The total acreage of land where turf and landscape nutrient management plans are required;
  ii) The acreage of lands upon which turf and landscape nutrient management plans have been implemented;
d) A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of training.

IV. TMDL Special Conditions Compliance other than Chesapeake Bay TMDL

JBLE-E received a *TMDL Baseline Assessment Report for Joint Base Langley-Eustis, Virginia*, which was published on 26 April 2013. This report discusses existing TMDLs based on the draft *2012 Virginia Integrated Report*, of which the final was published in January 2014. The only nutrient or sediment TMDL associated with JBLE-E's receiving water bodies is the Chesapeake Bay TMDL. Other planned TMDLs associated with the base's receiving water bodies address parameters other than nutrients or sediments (e.g., polychlorinated biphenyls [PCBs] or bacteria). Skiffes Creek, Warwick River, Morrison's Creek (Mulberry Island) and the James River are all receiving stormwater runoff from the installation.

V. MS4 Program Updates

Table 3 provides the schedule for future program updates.

Table 3: Future Program Plans Updates Schedule		
Updated TMDL Action Plans (TMDLs approved before July of 2008) – (Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other Than Chesapeake Bay)	Section 1 B	To be updated in PY2
Chesapeake Bay TMDL Action Plan – (Special Conditions for Chesapeake Bay TMDL)	Section I C	To be updated in PY2
Stormwater Management Progressive Compliance and Enforcement (MCM 4 – Construction Site Stormwater Runoff Control	Section II B 5	To be updated in PY2
Daily Good Housekeeping Procedures (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 a	To be updated in PY2
Other TMDL Action Plans for applicable TMDLs approved between July 2008 and June 2013 – (Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other Than Chesapeake Bay	Section I B	To be updated in PY3
Outfall Map Completed – (MCM 3 – Illicit Discharge Detection and Elimination) – Applicable to new boundaries identified as "urbanized" areas in the 2010 Decennial Census	Section II B 3 a (3)	To be completed in PY4
SWPPP Implementation – (MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 b (3)	To be completed in PY4
NMP Implementation – (MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 b (3)	To be completed in PY5